Erythematous Lupus of the Hand.

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ERYTHEMATOUS LUPUS OF THE HAND.

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Lupus erythematosus (Cazenave) is an affection of the skin which has proved itself interesting, not only from a clinical point of view, but because there has been so much discussion in regard to its pathogeny and pathology. Its clinical characteristics and appearances have been minutely described and made thoroughly familiar; yet they have not been so carefully elaborated as we might wish. What I intend to convey is this: that while erythematous lupus of the face and head has been quite frequently observed and described in every particular, and every phase of its evolution noted, the invasion of other portions of the skin has either escaped attention or has occurred so seldom that but few cases have been observed and of these but a small number have been accurately described.

That this disease occurs most frequently upon the face is fully proven by the statistics of every dermatologist; and that its occurrence upon the trunk or extremities is comparatively unusual is also the general experience of those who have paid any attention to the subject. It is the universal opinion of all authors that erythematous lupus of the hand is a rare form of the disease, and the rarity is still greater when the process is not found to be present upon any other portion of the body. This being the case, it is very strange that the reports of such cases which have been made, should, in a certain degree, be so meagre in details and I must urge this very incompleteness as an apology for the apparently unsatisfactory manner in which I have been compelled to tabulate the cases which I have succeeded in gathering together.

There is no doubt whatever, in my mind, that these do not represent more than a very small portion of the cases which have occurred, for two reasons. In the first place, many observers are unable to recognize the disease; and, in the next place, others observed it before it had acquired a distinct place in nosology. Yet, it must be comparatively infrequent when we take into consideration the number of competent dermatologists and the large amount of material which passes through their hands, in connection with the small number of cases of erythematous lupus seen by them and the extremely small number of patients

whose hands are affected by this disease. Of course, in the majority of cases, there is not much pain or deformity and scarcely any inconvenience attending the disease, relief being frequently sought for cosmetic purposes. This may act as a possible factor to account for the small number of cases actually observed.

On account of these and other reasons, I have deemed it proper to report a case of erythematous lupus of the hand and arm, which came under my care some time ago, and which possesses some interesting features. This is done in spite of the fact that the case is still under treatment and observation.

Case.—W. C. C., male, aged fifty-five, was referred to me on June 3, 1886, by Dr. F. Foster, of Memphis, Mo. The history of the case which was given to me, was as follows: The patient, whose occupation is that of a carpenter, is an American and married. His children are all healthy. His own general health has always been good and he has never had any other skin disease. There is no history of syphilis, nor is there any evidence of its ever having existed. The patient has always lived a regular life and his habits have always been temperate.

In June, 1882, he noticed a small "spot" upon the dorsum of the right hand. This remained and slowly increased in size until, in the course of a month, it had attained the dimensions of a silver dime, the color being that of a ripe cherry. The patient cut into this with his pen-knife and, from this time on, it began spreading rapidly. He was treated by a number of physicians who applied caustics, using chiefly chloride of zinc, but with negative results. In fact, he thought that the treatment greatly aggravated the trouble. In March, 1883, he went to Hot Springs, Ark., where he again submitted to a treatment with caustics, but without any benefit.

On July 6, 1883, he was seen by Dr. Foster. The lesion then embraced the entire dorsum of the hand and extended up to the second phalanges of the fingers. Dr. Foster removed a portion with the knife and was much gratified to see the wound heal kindly. After that time, he removed several large portions, the operations being always followed by "healthy granulations." The patient could never be persuaded to take chloroform and have all the diseased portions removed by excision; but, he continued to ply his vocation until his physical condition compelled him to abandon it.

June 3, 1886. Status præsens: The patient is about 5 feet 8½ inches in height, weighs about 160 pounds, and appears physically well developed. His pilous system is well developed and his skin is of normal thickness and elasticity. The color is normal on the covered portions, the face and hands being bronzed through exposure to the sun. The hair of the head is of a brown color, slightly mixed with gray. Upon no portion of the body, except the parts about to be described, can any affection of the skin be found. The part involved includes the hand and forearm of the right side. Here it may be noted that, in general, it is the dorsum of the hand and the extensor surface of the forearm that are implicated. The patches are rather irregularly distributed on account of the cicatrization which has taken place. Upon careful examination, patches are found distributed about as follows: One on the dorsal

surface of the thumb, involving the metacarpal and first phalangeal surfaces, and a smaller one, the second phalangeal surface, up to the nail but not implicating it. A very small patch is found upon the first phalanx of the index finger, another on the first phalanx of the middle finger, one on the first phalanx of the ring finger, and one involving the first and second phalanges of the little finger. An irregularly clover-leaf-shaped patch involves the skin over the metacarpophalangeal joints of the middle and ring fingers and extends up on the dorsum of the hand. Two or three patches are located over the carpometacarpal joint, on its dorsal aspect, one of the patches (the largest) encroaching upon the ulnar aspect of the wrist. A number of small patches are irregularly distributed over the dorsum of the hand. About two and one-half inches above the wrist-joint a heart-shaped patch exists, and this is surrounded by cicatricial tissue. At the junction of the middle and the upper third of the forearm we find an irregular horseshoe-shaped patch, which is so large that it encroaches upon both the ulnar and radial aspects of the arm. Its convexity is directed upward and, in the space included within its curve, a few small patches are present.

The sizes of the patches vary quite considerably. Some of them are about a fourth of an inch in diameter, and all dimensions can be found between this and four inches by one, which is approximately the dimensions of the largest one. The shapes of the patches are also irregular, although all of them have a tendency to assume convex contours.

The patches have a somewhat dark-red color, inclining to a lighter shade. On the fully developed lesions may be observed dirty, yellowish crusts a line or more in thickness, and consisting, in large part, of inspissated sebum. At some points these crusts are brownish from the admixture of blood, and everywhere are hard and stiff. They are well defined against the skin and feel quite rough to the touch. In addition, they are elevated above the general surface of the skin, and when removed it is noticed that an elevated border surrounds the lesion.

Between and surrounding some of the patches are superficial cicatrices. These are especially pronounced between the highest patch and the wrist-joint. Some are to be seen upon the fingers, and they have the same characteristics as the others. These scars are nearly white in color, having a slight pinkish tinge. They are quite flexible and, to the touch, communicate the sensation of a thinner skin rather than that of scar tissue. Upon close inspection, it is noted that small pits or depressions can be found irregularly distributed in some of the scars, giving that cribriform appearance seen to accompany cicatrices which are due to superficial destructive processes of the skin. External inspection does not reveal the presence of hairs, coil or sebaceous glands.

As regards subjective symptoms in this case, the patient states that he has had no occasion to complain, beyond experiencing a sharp pain at varying intervals. Sensation appears to be very fair in the forearm, and there is apparently no disturbance of innervation. The patient protects the arm and hand by means of a wet bandage laid over the site of the disease, and this may account, in part, for the immunity from pain. He complains of pain upon flexing the fingers, and says that there is a diminution in the power of the hand. He is not as strong in the right hand and arm as he formerly was.

With this history, the diagnosis of erythematous lupus was made. The treatment ordered was as follows: To apply a paste, composed of

concentrated lactic acid, to which sufficient kaolin to form a firm paste had been added, to the patches, the edges of which had been previously oiled. Dr. Foster carried out the treatment.

June 18. The paste was applied and proved to be exquisitely painful, so much so, indeed, that it became necessary to keep the patient under the influence of chloroform for nearly three hours, and it was only twelve hours later that he felt comfortable.

22d. A slough separated and the case is looking well.

August 11. The case is progressing finely. Applications of sapo viridis, to be followed by zinc oxide ointment, were ordered.

20th. Case nearly well. Pyrogallic acid ointment ordered.

January 16, 1887. The patient wrote that the "sores" looked smooth and healthy.

February 3. The "sores" show no disposition to heal.

19th. The condition seems to remain in *statu quo*.

March 10. The condition is about the same, with the exception of a new patch which has shown itself above the elbow.

June 5. The hand has become worse and the patch on the arm is now four inches in diameter. I urged the patient to come to the city, as I could do nothing by correspondence.

September 24. The patient presented himself, and his condition was nearly as bad as when I first saw him. I excised a small lesion on the arm and the wound healed kindly by the first intention. He was ordered to remove the crusts every day by means of a warm bichloride of mercury solution, and then apply a mixture of equal parts of olive oil and campho-phenique to the lesions. Under this treatment he steadily improved for two weeks and left for home.

October 15. The condition again at a standstill; an ichthyol ointment ordered.

December 8. Patient reported no improvement. I urged him again to come to the city.

February 24, 1888. Patient presented himself once more, and his condition was anything but good. He was ordered "cold cream" to the patches, which were quite painful.

March 4. The compound salicylic plaster, as recommended by Dr. Klotz, of New York, was applied. This proved very good in its action, but so painful that the patient positively refused to continue its use.

14th. Creasote was applied to the elevated edges of the patches and campho-phenique to the central portions. This treatment gave good results. The patient left a few days after, but continued the treatment at home, and one month later (April 15th) his physician reported him as doing very well. Since that time I have received no news of the progress of the case, which has, on the whole, been about as unsatisfactory as the majority of cases of lupus erythematosus are when subjected to treatment.

It is a well-known fact that cases of erythematous lupus are, as a rule, essentially chronic and very rebellious to treatment. While single lesions may be caused to disappear, fresh outbreaks are constantly occur ring. It is also a matter of observation that, in the majority of cases, the patients disappear before complete results are attained. Moreover, as relapses are so prone to occur, it is a very difficult matter to form any

just estimates of the results of treatment. On this account I have refrained from particularizing or dilating on this point, deeming a clinical analysis of cases of more interest.

Neither do I intend to touch upon either the pathogeny or pathology of the disease at present, reserving these two interesting subjects for some future paper, in which I intend to present some of the results of a few researches made in this direction.

Clinical Analysis.—A search through literature, and correspondence held with dermatologists in this country, have resulted in the record of forty-six cases, exclusive of the one just described. Of these, ten are unpublished. Upon looking over this list, I find that the majority have one fault in common, viz., the incompleteness of the record. This is due to a number of causes. One is that some observers directed their attention to but a few points; others did not keep notes of the cases at the time they were seen; and others kept incomplete records or made insufficient reports. I have been informed by some correspondents that they could not supply me with any information on the subject, because they did not keep notes of any cases.

In looking over the table, we find that of the 26 cases wherein sex is specified, 15 were females and 11 males, thus confirming the statistics of erythematous lupus of other portions of the body. Where the sex is not specified (in 21 cases) it is very probable that the disease occurred most often in females. The proportion is approximately two to one, in the experience of all observers. In the above cases, involving the hand, it is nearly one and a half to one, but the record is not sufficiently complete to arrive at a satisfactory conclusion.

The earliest period of life at which the disease occurred is given as 7 years; the latest, as 50. The average age is 26.5. Here we must take into consideration 28 cases in which these details are not reported. The age at which the reporter saw the patient is more fully given, there being but 22 cases in which this item is omitted. In the remaining 25 cases, the youngest was seen at the age of 12; the oldest at 60. The average age when seen is 33.7. Taking the 19 cases in which both the age at which the disease first made its appearance and the age at which the reporter saw it, are given, we find that the shortest time permitted to elapse between the appearance of the disease and its presentation to a competent observer is 2 years; the longest, 21. The average time is 8.42 years. Of course, many of these had been seen and been treated by physicians, and one of the cases was cured when seen by the observer who reports it (see table, No. 36). The length of time allowed to elapse, however, is always somewhat considerable and is in some measure an indication of the comparatively small amount of annoyance caused by the disease in its earlier stages.

No.	Age when affected	Age when observed.	Sex.	Part first affected.	Part affe ted other than hand.	Hand affected.	Fingers affected.	Part of hand or finger affected.	Result of treatment.	Observer, and where published.	Remarks.
1	28	38	M.	.....	Face	Both	Fingers	Dorsum	.....	E. Cazenave: Annales des mal. de la peau et de la syph., i. 297, 1850–51.	
2	...	...	...	Fingers	.....	...	"	.....	.....	E Wilson: Journ of Cutaneous Medicine, Jan. 1869.	
3	...	...	...	"	.....	...	"	.....	.....	"	
4	...	...	...	"	Nose	...	"	.....	.....	"	
5	...	...	...	"	"	...	"	.....	.....	"	
6	...	...	...	"	"	...	"	.....	.....	"	
7	...	...	...	"	Nose and cheek	...	"	.....	.....	"	
8	...	...	...	"	"	...	"	.....	.....	"	
9	...	...	...	"	Ears and cheek	...	"	.....	.....	"	
10	...	...	...	"	Lids and neck	...	"	.....	.....	"	
11	...	...	...	"	Cheek, ears and scalp	...	"	.....	.....	"	
12	...	...	...	"	Ears and nose	...	"	.....	.....	"	
13	...	...	...	"	"	...	"	.....	.....	"	
14	17	20	F	Face	Face	Both	"	Palms and dorsum	.....	I Neumann: Beitrag z. Kentniss der Lup. Eryth. Wiener med. Woch., No. 68, 1869.	
15	...	...	F.	"	"	"	"	Palm	.....	M. Kohn: Arch. für Derm. u. Syph, 1869.	Rhagades.
16	20	33	F.	"	"	"	"	.....	.....	M. Kaposi: Arch. für Derm. u. Syph., Prag. 1872.	
17	...	36	F.	"	"	"	"	Sides	.....	"	
18	...	24	F.	"	"	"	"	Extremities	.....	"	
19	...	29	F.	"	"	"	"	Sides	.....	"	
20	...	32	F.	"	"	"	"	Dorsum	.....	"	
21	...	...	...	.....	.....	Hand	"	"	.....	Tilbury Fox: Atlas of Skin Diseases. Phila. 1876, p 74.	
22	...	...	...	.....	.....	"	.....	"	.....	J. H Stowers: Trans. Brit. Med. Assoc. Arch. Dermat. v. p.413	
23	...	...	...	.....	.....	"	.....	"	.....	"	
24	...	...	...	.....	.....	"	.....	"	.....	"	
25	18	24	F.	Fingers	Nose	Left	Middle and little	.....	.....	J. Milton: Arch Dermat., ii. p. 131.	One finger amputated.
26	...	...	...	.....	Face	...	Fingers	Dorsum	.....	A. Jamieson: Edinburgh Med. Journ., p. 1006, 1878.	Diminished power of flexion.
27	21	25	F.	Face	"	Both	.....	Palms	.....	L. D. Bulkley: Journ. Cut. and Ven. Dis., ii. 3, 1879.	

No.	Age when affected	Age when observed.	Sex.	Part first affected.	Part affected other than hand.	Hand affected.	Fingers affected.	Part of hand or finger affected.	Result of treatment.	Observer, and where published.	Remarks.
28	7	4	M	Fore-arms	Face	Both	Fingers	.....	.....	J. Hutchinson: Lectures on Clin. Surg. Part II. 1879, p. 275.	Fingers "pulpless."
29	...	12	M.	Face	"	"	.....	.....	.....	"	
30	42	44	.	"	"	...	Fingers	.....	.....	"	
31	...	46	M.	"	"	Both	.....	.....	.....	"	
32	14	19	F.	Hand	.....	Left	Fingers	Dorsum	Cured under treatment	J. N. Hyde: Journ Cut. and Ven. Dis., ii., 1884, p. 321.	Thumb nail not attacked.
33	23	38	F.	"	Lip and chin	Right	.....	"	.....	"	Right-handed.
34	14	29	F.	"	.....	Left	Fingers	Palm	Slightly improved under treatment	"	Melanodermic striæ of face.
35	26	38	M.	"	.....	Right	"	Dorsum	.....	"	Used right hand constantly. Rhagades.
36	30	50	M.	Right middle finger	.....	"	Middle	Dorsum of hand finger and lateral aspect of finger	Negative	H. G. Klotz: Journ. Cut. and Genito-Urinary Diseases, Feb. 1888.	Died of consumption; nail not affected.
37	19	40	F.	Hand	Fore-arm	Both	Index and middle of left hand	Dorsum of hand; dorsum and lateral aspect of fings	Negative; tried all means; Paquelin's cautery (punctate) arrested it	O. Rosenthal: Deutsche med. Wochschr. No. 19, 1887.	
38	26	30	F.	Hands	.....	"	R—thumb, index, and finger. L—all but little fing.	"	Cured when presented.	R. W. Taylor. Unpublished.	
39	31	35	M.	Face	Face	Right	"	"	Cured; much relieved in six mos.	"	
40	48	50	M.	Right thumb	.....	Both	R—thumb and index L—thumb	Dorsum and radial aspect of right thumb	Cured in eight mos.	C. Heitzman. Unpublished.	
41	20	22	M.	Left index	Nose	"	Dorsum of index	Dorsum; few spots on palm	Nearly well in one month; relapse in one year.	G. H. Fox. Unpublished.	
42	50	60	M	Left hand	.....	Left	Thumb and little finger	Dorsum	Cured	S. Sherwell. Unpublished.	
43	...	...	...	Hand	.....	Both	.....	.....	.....	James C. White. Unpublished.	No other portions but the hands affected.
44	...	...	...	"	.....	"	.....	.....	.....	"	"
45	...	...	...	"	.....	"	.....	.....	.....	"	"
46	...	...	...	"	.....	"	.....	.....	.....	"	"
47	50	55	M.	Right hand	Right arm and forearm	Right	All	Dorsum	Nearly cured; relapsed; improved	A. H. Ohmann-Dumesnil.	Diminished power of flexion.

The part first implicated is a matter of some interest. This fact is reported in 41 cases. In these, the fingers were the portion first affected in 15 cases; the face in 12; the hand in 13; and the forearm in 1. In this last case the arm was continually exposed, but this seems to have played no part in the production of the disease.

Besides the hands or fingers, we find that in a number of cases other portions of the skin were involved. In the 29 cases in which this is noted, the nose and face are mentioned most often. It is only in Nos. 36, 37, and 47, that some portion of the face or head was not also involved in addition. In 12 of these cases the disease began in the face, so that in 16 cases the parts other than the hands were invaded subsequently to the appearance of the disease upon the latter.

In the entire list of 47 cases, specific information as to the hand implicated is given in 33. Of these, both hands suffered in 16 cases; the right only in 5; the left only in 4; "one hand" is mentioned four times; and 4 are unspecified. Or, adding together those specified, we find that in 16 both hands were involved; and in 12 one hand only, or very nearly in equal proportions. 6 males and 10 females had both hands affected; 4 males and 1 female, the right hand only; and 1 male and 3 females, the left hand only. The affection was as severe on the left hand of a right-handed individual as on the right of a right-handed one. The amount of use to which a hand is put seems to exercise little or no influence upon the severity of the involvement.

The seat of the erythematous lupus of the hand is also a matter of some interest. The dorsal aspect of the hand is apparently the site of predilection. In 25 cases in which the location is mentioned, the dorsum was the seat of the disease in 17 cases; in 3 the palm alone was affected; and in 2 both dorsum and palm were implicated. In 3 cases the side of the hand was affected, and in 1 the ends of the fingers.

In 2 cases there were fissures observed in the hands, and in 1 (No. 28) the pulps of the fingers were atrophied, this being probably due to the fact that the ends of the fingers were affected by the disease. In several the power of flexing the hand was markedly diminished.

In regard to the general condition of the patients, it may be stated that, while a number of authors report a depressed general state, others report their patients as being apparently in good health. As this matter is not fully dwelt upon by authors or by those who have reported cases, it is not possible to be conclusive on this point. In my case, the patient has always been in a good condition physically, and has never complained of any other affection than that on his hand and arm.

I wish to acknowledge valuable assistance from several papers on the subject of this essay, notably Dr. J. N. Hyde's (*Journal of Cutaneous and Venereal Diseases*, 1884), and I also seize this opportunity to extend

my heartfelt thanks to all the gentlemen who so kindly and courteously answered my letters of inquiry.

In conclusion, I think that the foregoing analysis justifies me in drawing the following conclusions:

1. Erythematous lupus of the hand is a form of the disease which is comparatively of infrequent occurrence.
2. Like the disease in other localities, it is found more frequently in women than in men.
3. This forms begins most frequently on the hands or fingers.
4. In the majority of cases the face or the head is also implicated.
5. Both hands are not more frequently involved than one hand alone.
6. The disease generally makes its appearance when adult life is reached.
7. It is essentially chronic in nature and rebellious to treatment.
8. The therapeutic results obtained are, in general, not satisfactory.
9. The disease does not seem to impair the general health.